

W. W. SINCLAIR & E. GALVIN.

STOPPING MECHANISM FOR SPINNING JACK.

No. 172,187.

Patented Jan. 11, 1876.

Fig. 1

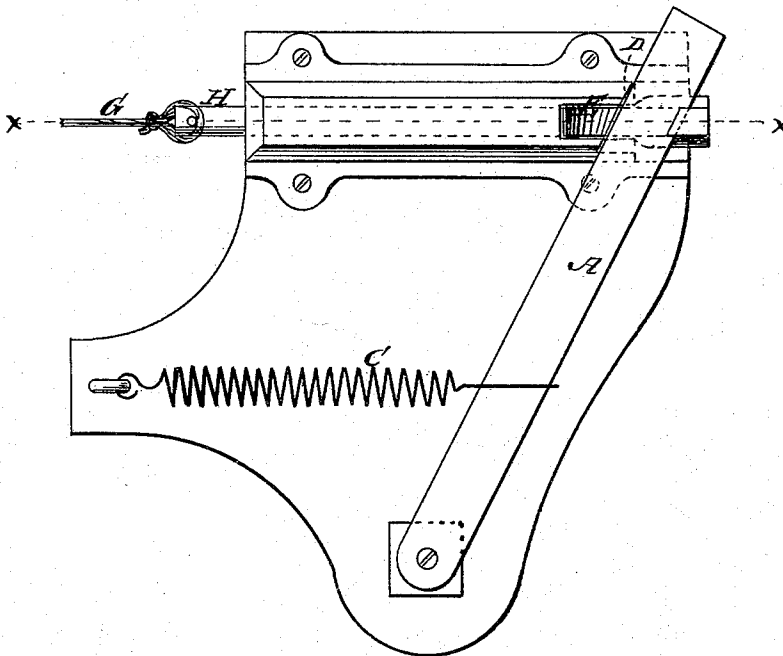
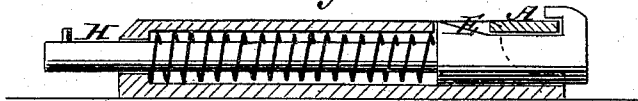


Fig. 2



WITNESSES:

E. Wolff
C. Dittmer

INVENTOR:

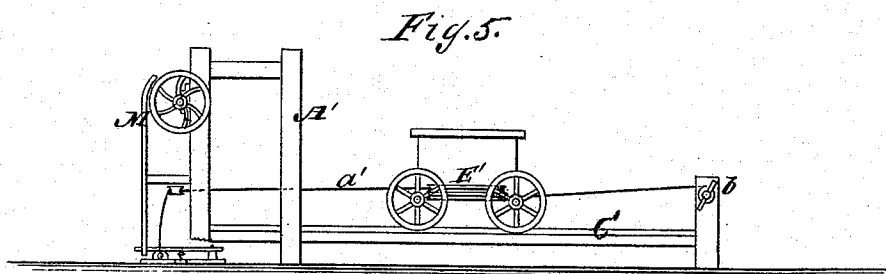
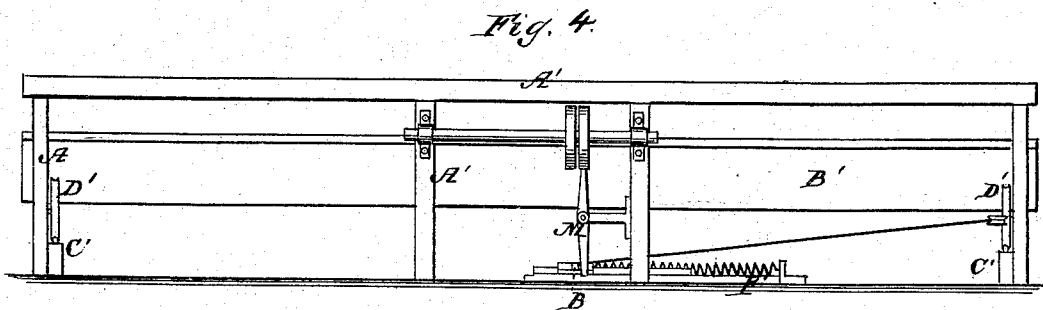
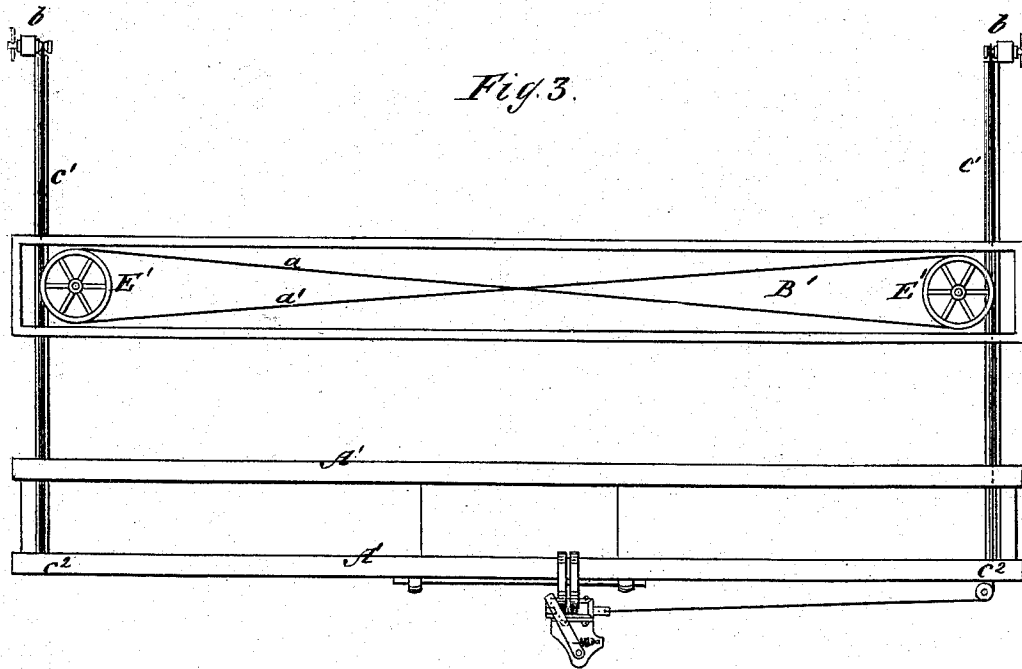
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ATTORNEYS.

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WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM W. SINCLAIR AND EDWARD GALVIN, OF MOTTVILLE, NEW YORK.

IMPROVEMENT IN STOPPING MECHANISMS FOR SPINNING-JACKS.

Specification forming part of Letters Patent No. 172,187, dated January 11, 1876; application filed September 12, 1874.

To all whom it may concern:

Be it known that we, WILLIAM W. SINCLAIR and EDWARD GALVIN, of Mottville, in the county of Onondaga and State of New York, have invented a new and Improved Stop-Motion for Spinning-Machines, of which the following is a specification:

The invention consists of automatic mechanism for throwing off the driving-belt of a spinning-jack in case the squaring-band breaks or fails to act from looseness or other cause, which is always attended with considerable damage to the yarn and machinery. The shifter-lever has a strong spring attached to it for throwing it when released or tripped by the failure of the squaring-band to act. The said spring is held distended, ready for action, by the shifter-lever itself, which is lodged in a notch in a frame-piece, and is tripped by a sliding cam-rod when the band fails, and throws the belt-shifter.

Figure 1 is a plan view of the contrivance, in which a lever is used for the belt-shifter, and for holding the spring. Fig. 2 is a sectional elevation of Fig. 1, taken on the line *xx*. Fig. 3 is a plan view of a portion of a mule, showing the application of our improved stop-motion. Fig. 4 is a side elevation, and Fig. 5 is an elevation taken at right angles to that of Fig. 4.

Similar letters of reference indicate corresponding parts.

A' represents the frame of a spinning-jack; B', the frame or carriage, which travels on the track C', and grooved wheels D' D'. *a a'* are squaring-bands, which start from the tighteners *b*, pass around the double-grooved

pulleys E', and are commonly fastened to the frame at *c² c²*. By means of these bands both ends of the carriage are compelled to advance with equal rapidity along the track C'. In the event of one or both of these bands breaking, the carriage, owing to its great length, is at once thrown from the track.

To obviate this difficulty, and to provide a means of stopping the jack instantly upon the breaking of a squaring-band, is the object of the present invention, which is as follows:

The letter A, Fig. 1, represents the shifter-lever for throwing off the driving-belt by actuating the shifter M, Fig. 4. The spring C throws the lever A to shift the belt when said lever is tripped out of the notch D, in which it is set to be ready for throwing the belt. The lever is tripped out of the notch by the sliding cam E, which is moved to the right by the spring F when either of the squaring-bands fails, one of the bands being connected to its spindle H by the cord G.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with squaring-band *a a'* and belt-lever M, of cord G, spring-spindle H, trip-cam E, notch D, shifter-lever A, and spring C, substantially as and for the purpose specified.

WILLIAM W. SINCLAIR.
EDWARD GALVIN.

Witnesses:

DARIUS H. DE LANO,
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